REPORT TO THE TWENTY-THIRD LEGISLATURE

STATE OF HAWAII

2006

PURSUANT TO HCR 229, HD1, SD1
2005 SESSION LAWS HAWAII
REQUESTING THE LEGISLATIVE REFERENCE BUREAU TO COORDINATE STUDIES, WITH THE ASSISTANCE OF THE DEPARTMENT OF HEALTH TO EVALUATE THE IMPACT OF THE PHYSICIAN "ON-CALL" CRISIS ON THE QUEEN'S MEDICAL CENTER TRAUMA CENTER TO PROVIDE EMERGENCY MEDICAL SERVICES IN THE STATE OF HAWAII, AND TO RECOMMEND ANY APPROPRIATE GOVERNMENT AND PRIVATE SECTOR RESPONSES TO THE ON-CALL CRISIS TO ENSURE CONTINUED ACCESS TO TRAUMA LEVEL CARE

PREPARED BY:
STATE OF HAWAII
DEPARTMENT OF HEALTH
DECEMBER 2005

REPORT TO THE LEGISLATURE
Pursuant to HCR 229, SD1, HD1

Introduction:

This report by the Department of Health (DOH) responds to the request of the Legislature, through House Concurrent Resolution No. 229, S.D. 1 (HCR 229) adopted during the Regular Session of 2005, to analyze issues pertinent to the impact of the increasing difficulty in assuring sub-specialist physicians for emergency call (the "on-call" crisis) and the impact on the Queen's Medical Center Trauma Center (QMC), and access to appropriate trauma care statewide.

The Legislative Reference Bureau (LRB) and the DOH have collaborated in addressing the specific questions posed by HCR 229. The DOH was asked to analyze the determinants of the current situation in Hawaii, and its impact on patient care. The LRB was requested to identify and analyze potential solutions to the on-call crisis that have been proposed in the literature or used in other States.

The request for analysis on the Department's part was felt to best be accomplished through consultation, as the necessary expertise does not exist within the DOH. Through a consultation from the American College of Surgeons (ACS) Committee on Trauma, the body that evaluates and accredits Trauma Centers across the nation, DOH was able to obtain a systematic review and analysis of Hawaii's trauma system. The ACS had on several previous occasions evaluated the QMC as a Level II Trauma Center, but the current consultation was specifically for **the system** and not any one hospital.

The ACS team began their consultation with a pre-review questionnaire and request for documents. This data was collected by the Department's Emergency Medical Services System Injury Prevention Branch (EMSSIPB) and the Healthcare Association of Hawaii (HAH). Conference calls prior to the on-site visit were conducted between ACS, HAH and the DOH to clarify the responses to the pre-review questions and to clarify the focused questions and objectives that the State expected from the review.

An expert panel of seven individuals, including surgeons, a trauma system manager and a paramedic spent one week in Hawaii in October of 2005. They gathered specific information on a variety of questions from a range of informants including sub-specialist and general physicians, hospital administrators, nurses, paramedics, and data specialists holding open sessions with interested parties in Honolulu, Maui and the Big Island. The biographies of the reviewers and the list of participants in this review are listed in the appendix to the attached report.

The ACS report identifies specific steps that Hawaii can take to strengthen its trauma system. It identifies the DOH as the lead in planning and implementing a system

that will provide increased resources through public support, in an equitable and efficient manner.

The full ACS report is attached and contains important specific information and recommendations. The following is a bullet point summary of their findings:

ACS TRAUMA SYSTEM CONSULTATION: SUMMARY

Resources, Advantages & Assets

- Excellent injury prevention, across all age groups
- Mature, statutorily enabled and funded state EMS system
- Committed, high volume ACS-verified Level II trauma center in Honolulu
- Growth, development, & individual provider commitment in some areas
- Expanding tax base with real estate development & growth and the potential to help fund trauma system improvements at the state or municipal level
- Centralized billing model for ground ambulance services
- Electronic pre-hospital data collection

Challenges

- Extreme geographic isolation with limited access and re-supply capacity
- Geographic and operational barriers to intra-system transport and transfer
- Lack of sustained staffing & leadership (medical & administrative) to sustain trauma system development
- Variable physician commitment, recruitment, and retention for the provision of trauma care
- "Compartmentalization" of functions of system (common to most systems)
- Lack of strong linkage between clinical and administrative components of system
- Limited public and legislative appreciation of the essential public service aspect of trauma care and recognition of trauma as a public health priority

Current Opportunities

- Challenges that have stretched the capacity of Hawaii's only verified trauma center have created legislative interest in the trauma system.
- The recent retirement of leadership at the EMSIPCS Branch creates an opportunity to tailor the job description and requirements for that position to include leadership in trauma system development.
- The current economic status of Hawaii's State Government creates an opportunity to support the implementation of a comprehensive, inclusive, statewide trauma system plan.
- The state of Hawaii has a very strong emergency management/civil defense program throughout the state that could, potentially, provide resources to the trauma system development activities.

Questions posed by HCR 229 to DOH:

(1) **A DESCRIPTION OF THE ON-CALL ISSUES AND ITS IMPACT ON THE LEVEL II TRAUMA CENTER**

During the 2005 Legislative session testimony from QMC was provided describing the difficulties experienced in securing physician sub-specialists, such as orthopedic surgeons and neurosurgeons, and the resultant negative financial impacts. This testimony is reviewed by the LRB in its analysis. Other hospitals on Oahu and the neighbor islands face similar issues in attracting sub-specialists to take call.

The impacts on the Level II Trauma Center are multiple. There is continual difficulty in filling the call schedule, even with additional compensation. Physicians who take call at QMC feel they are being called upon to shoulder an unreasonable number of transfers for care that could have been handled at another facility. These additional cases contribute to the unwillingness to take call. There is no indication that the situation has improved for QMC in the past year but it continues to operate as a Level II Trauma Center.

(2) **IDENTIFICATION OF THE FACTORS THAT HAVE CONTRIBUTED TO THE ON-CALL ISSUES BECOMING A CRISIS**

The factors that have contributed to the current difficulty are several. Low physician numbers in many subspecialty areas is a factor not confined to Hawaii as many sub-specialty training programs have reduced rather than increased their slots.

One factor particularly difficult for Hawaii is that our population is relatively small and compartmentalized on islands. The result is a limited patient base for sub-specialty physicians such as neurosurgeons, whose services are not commonly needed. For this reason, it is not surprising that the neighbor islands have difficulty in attracting enough physicians to cover call in certain specialties. Low physician numbers in many subspecialty areas at the very outset are an issue, even if everyone was willing to be on-call.

Physicians are less willing to be on-call at night and weekends than in previous years when it was more common for new physicians to volunteer for call in order to build their practices. Now physicians are often tied to managed care networks that provide their patient flow, and they have no reason to take call except for their own patients. Other issues contributing to the reluctance to take call include increased liability exposure and concerns about malpractice suits and the relatively low compensation for trauma patients. In areas where sub-specialty physicians are rare, there are no other physicians to share the call burden.

Some neighbor islands have been able to attract an increased number of specialty physicians. The Hawaii Health Systems Corporation (HHSC), which operates the majority of neighbor island hospitals, has had specific planning meetings to assist its

individual hospitals in attracting specialty physicians and/or assuring that their services are available for emergencies. Adding to the number of physicians without an adequate patient population base, however, is very costly.

(3) **THE RESPONSE OF THE QUEEN'S MEDICAL CENTER TO ADDRESS THIS CRISIS AND KEEP THE TRAUMA CENTER OPERATIONAL**

Despite the required investment of uncompensated resources, QMC continues to maintain a Level II Trauma Service.

(4) **THE ROLE OF THE TRAUMA CENTER IN THE STATE COMPREHENSIVE EMERGENCY MEDICAL SERVICES SYSTEM**

The report from the ACS describes in detail specific roles for the Level II Trauma Center, as well as its role and place in the broader context of a comprehensive Trauma System.

(5) **AN ANALYSIS OF HOW THE DECISION TO TRANSFER PATIENTS IS MADE, INCLUDING THE DESCRIPTION OF THE TRANSFER PROCESS, AND RECOMMENDATIONS TO IMPROVE THIS PROCESS, IF ANY, TO ENHANCE PATIENT OUTCOMES.**

In general, the decision to transfer a patient from one facility to another is based on patient need and facility capabilities. Emergency transfers between hospitals are bound by the Emergency Medical Treatment and Active Labor Act (EMTALA) which stipulates in part that every patient who presents to a hospital or emergency department, regardless of their condition or ability to pay, must receive a medical examination and treatment. However, if a facility has limited capabilities, the patient can be stabilized and receive preliminary care for their condition, followed by transfer if care that is needed is only available at another institution. Because patients that need to be transferred are usually in serious or critical condition, they are transferred by ground ambulance or air ambulance.

To illustrate the transfer process, a patient in a motor vehicle crash might be taken from the scene by ambulance to a small nearby hospital. There he must first be examined and given immediate stabilizing treatment such as oxygen or IV fluids. But the examination might indicate a need for orthopedic surgery, which is unavailable because the hospital does not have a surgeon on call. The patient can then legally be transferred, but only if there is an orthopedic surgeon accepting responsibility for the patient at the destination hospital. Transfer ambulances cannot legally even start the transfer process without the name of the accepting physician at the destination hospital.

When multiple institutions have difficulty with obtaining coverage for their call schedule, transfers can become very problematic. The lack of subspecialty physicians on call at hospitals drives up the number of transfers needed, while also limiting the

number of hospitals able to accept patient transfers. This in turn impacts outcomes for patients because delays in treatment can result.

There are two groups of strategies to improve problematic patient transfers. One set of strategies would focus on having more physicians available to accept transfers. The other would attempt to increase the capabilities of hospitals so that they could care for patients without transfer. In general, the patient is best served by remaining in their own community, as long as they can receive an appropriate level of care. Because of limitations mentioned earlier in this report, it is not feasible that every medical service be available in every community. Therefore, strategies aimed at both sides of the transfer process are needed.

Conclusion:

The DOH is prepared to assemble a Trauma System Planning Committee to review the ACS report and begin the planning process recommended therein. The research done by the LRB and the analysis provided in their report is very thorough, and will be invaluable in planning solutions for Hawaii. The Department anticipates that in the coming year a comprehensive plan will be developed that will include the necessary legislative support for reforms and financing that may be needed to develop a Statewide Trauma System that will improve outcomes for our citizens.